

Draft 7/27/2012

1. All work shall be completed in accordance with plans prepared by King & McGregor and Coleman Engineering and received on July 25, 2012. Said plans are kept on file at the MDEQ's Water Resources Division.
2. In issuing this permit, the MDEQ has relied on the information and data which the permittee has provided in connection with the permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
3. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
4. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval, or authorizations necessary to conduct the activity.
5. Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this permit shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
6. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity and/or mitigation plan from the MDEQ. Such revision requests shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.
7. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to accept transfer of the permit. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.
8. Authority granted by this permit does not waive compliance requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA. Any discharge of sediment into waters of the state and/or off the road right-of-way is a violation of this permit, Part 91, and Part 31, Water Resources Protection, of the NREPA. A violation of these parts subjects the permittee to potential fines and penalties.
9. Temporary soil erosion and sedimentation control measures shall be installed before commencement of the earth change and shall be maintained daily. Temporary soil erosion and sedimentation control measures shall be maintained until permanent soil erosion and sedimentation control measures are in place and the area is stabilized. Permanent soil erosion and sedimentation control measures for all slopes, channels,

ditches, or any disturbed area shall be installed within five (5) calendar days after final grading or the final earth change has been completed.

10. All raw areas resulting from the permitted construction activity shall be promptly and effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner so as to prevent erosion and any potential siltation to surface waters or wetlands.
11. All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets by September 20th.
12. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, and stabilized with sod and/or seed and mulch in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
13. During removal or repair of the existing structure, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
14. The use of explosives for removal of a structure over a water body, including any abutments or piers, is prohibited.
15. Prior to the removal of the existing structures located in the water or wetland; cofferdams of steel sheet piling, gravel bags, clean stone, coarse aggregate, or concrete barriers shall be installed to isolate all construction activities from the water. The barriers shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site. All cofferdam and temporary steel sheet pile shall then be removed in its entirety, unless specifically shown to be left in place on the plans. Cofferdam and sheet pile that is left in place shall be cut off at the elevation shown on the plans and shall be a minimum of 1 foot below the stream bottom.
16. The existing structure shall be kept open to pass the stream flow during removal of the existing road fill.
17. The placement of the new culvert and the initial placement of fill in the stream shall be done immediately after removal of the existing culvert. The placement shall be conducted in such a manner that all flow is immediately passed through the new culverts, allowing the major placement of fill to be done in the dry or in still water where erosion and siltation will be minimized. The fill material used in this initial placement shall be washed gravel, coarse aggregate, or rock and shall be placed at both ends of the culvert to a level above normal water level before backfill material is placed. Bagged concrete riprap may be used for end fill.
18. The culvert shall be installed to align with the centerline of the existing stream at both the inlet and outlet ends, and must be recessed to allow a natural substrate throughout the structure, unless otherwise indicated in the conditions of this permit.

19. Road fill side slopes shall not be steeper than 1-on-2 (1 vertical to 2 horizontal) except where headwalls of reinforced concrete, mortar masonry, dry masonry, or other acceptable methods are used.
20. Road fill side slopes terminating in the stream and any raw streambanks resulting from this construction shall be immediately riprapped to the ordinary high water mark. The exposed bank above the ordinary high water mark and all other raw slopes and ditches draining directly to the stream must be protected with riprap over geotextile filter fabric or stabilized with appropriate Best Management Practices based on site conditions as necessary to provide effective erosion protection.
21. If the project, or any portion of the project, is stopped and lies incomplete for any length of time other than that encountered in a normal work week, every precaution shall be taken to protect the incomplete work from erosion, including the placement of temporary gravel bag riprap or other acceptable temporary protection.
22. No work shall be done in the stream during periods of above-normal flows except as necessary to prevent erosion.
23. Unless specifically stated under the "Permitted Activity" of this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
24. If the stream is blocked off with clean stone and/or gravel bags and the water pumped around the crossing the water shall be discharged into the watercourse with appropriate treatments to remove suspended particles and to dissipate energy. An extra pump shall be kept on site in the event of failure.
25. If the stream is passed through a temporary channel, the channel shall be completely stabilized with riprap placed over geotextile filter fabric prior to passing flow and maintained in good working condition until the culvert is installed and stabilized.
26. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed on upland (non-wetland, non-floodplain or non-bottomland), prepared for stabilization, and stabilized with sod and/or seed and mulch in such a manner so as to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
27. IDENTIFICATION OF NON-WORK AREAS
28. Prior to the start of construction, all adjacent non-work wetland areas shall be protected by properly trenched filter fabric fence to prevent sediment from entering the wetland. Orange construction fencing **shall** be installed ~~as needed~~ to prohibit construction personnel from entering or performing work in these areas. Fencing shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site. The erosion barrier shall then be removed in its entirety and the area restored to its original configuration and cover.
29. All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be CONTAINED in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be STABILIZED with

sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.

30. Equalization culverts shall be placed at an elevation within the roadway to insure that water will reach equal levels on either side of the road.
31. The proposed channel relocation shall be constructed in the dry. Upstream and downstream plugs shall remain in place until the new channel is capable of handling flows without causing siltation.
32. Graded riprap consisting of clean stone or cut rock shall be placed in sufficient quantity over geotextile fabric so all voids are filled to provide adequate erosion protection. The use of broken concrete or asphalt is not authorized at this site.
33. A storm water discharge permit may be required under the Federal Clean Water Act for construction activities that disturb one or more acres of land and discharge to surface waters. For sites over five (5) acres, the permit coverage may be obtained by a Part 91, Soil Erosion and Sedimentation Control (SESC), permit and filing a "Notice of Coverage" form to the MDEQ's Water Bureau. For sites with disturbance from one acre up to five acres, storm water coverage is automatic once the SESC permit is obtained. These one to five acre sites are not required to apply for coverage, but are required to comply with storm water discharge permit requirements. Information on the storm water discharge permit is available from the Water Bureau's Storm Water Permit Program by calling 517-373-8088 or at www.michigan.gov/deqwater. Select "surface water" and then select "storm water."
34. The following threatened or endangered species are known to occur on or near this project site and may be impacted by your activities: **Narrow-leaved Gentian and the Cerulean Warbler**. Issuance of this permit does not obviate the need to obtain approval under Part 365, Endangered Species, of the NREPA, from the Michigan Department of Natural Resources' (MDNR) Natural Heritage Program prior to commencement of construction activity. Please contact ?? Endangered Species Specialist, Wildlife Division, MDNR, P.O. Box 30180, Lansing, Michigan 48909-7944, at 517-373-1263.

Wetland Preservation/Mitigation

35. The permittee shall, as a primary condition of this permit, mitigate the loss of 25.48 acres of wetland, consisting of _____ acres of forested, _____ acres of scrub-shrub, and _____ of wet meadow/emergent wetland.
36. The permittee is required to submit an acceptable Wetland Mitigation and Monitoring Plan to the MDEQ for the proposed mitigation site within 60 days of the issuance of this permit. The applicant must receive approval of the wetland mitigation plan from the MDEQ. **Regulated activities authorized by this permit are prohibited until a final mitigation plan is submitted by the permittee and approved in writing by the MDEQ.**
37. **In order to mitigate for the direct and/or indirect loss of these 25.48 acres of wetland the permittee shall preserve of 500 +/- acres of high quality wetland into a permanent conservation easement as provided in mitigation plans dated_____.** The permittee shall complete enhancement activities in the conservation easement site to remove or reduce threats to, or prevent the decline of, wetland functions and values, and shall provide for the long term management and sustainability of the preservation-mitigation area approved for preservation credit.

38. Baseline Documentation

The permittee shall submit a baseline report by _____. The baseline report shall include a land use history, a wetland delineation, a current aerial photo, appropriate maps, and a plan view that depicts the overall site including vegetation zones (forested, wet meadow, etc.). The plan view should include property lines, natural features (streams, endangered plants or animals, etc.), existing and adjacent land uses (roads, utility lines, structures, vegetative buffer area, trails, etc.), areas of invasive species, drains or ditches, and other anthropogenic influences (stormwater, etc.)

39. Management Plan

A management plan outlining goals, methods, and measures to document actions taken to enhance the site; minimize or eliminate identified threats to the easement; and address any on-going site maintenance activities such as water control structures, invasive species control measures, etc. that will ensure the long term sustainability of the conservation easement area shall be submitted and approved by the MDEQ prior to initiating any work in regulated areas authorized by this permit.

40. Long Term Management Plan and Stewardship Agreement

Active long term management, monitoring, and maintenance are determined to be necessary to ensure long term sustainability (e.g. prescribed burning, invasive species control, maintenance of water control structures, easement enforcement). The permittee shall submit a long term management plan for all wetland preservation areas by _____ for MDEQ approval. The long-term management plan shall include provisions for monitoring, placement and maintenance of signs and fencing, periodic inspection of the site, removal of trash and debris, control of invasive species, blocking of illegal trails, maintenance of existing structures such as water control structures, annual reporting to the MDEQ, and any other site-specific management practices.

The permittee must identify a responsible party to provide long term management and maintenance of the conservation easement site. An adequate stewardship agreement with an appropriate third party (e.g. municipality or non-profit resource management agency such as a land conservancy) and the MDEQ, that is in compliance with the long term management plan shall be established and recorded as Exhibit E to the Conservation Easement Agreement. A long term financing mechanism or endowment fund to provide for the long term management and sustainability of the site shall be considered as part of the Stewardship Agreement to provide for the long term maintenance and sustainability of the Conservation Easement area.

41. The permittee shall submit a bond or letter of credit to the MDEQ in a form identical to the financial assurance models on the MDEQ's website at www.michigan.gov/wetlands in the amount of \$_____ to ensure that the conservation easements are recorded, signs are posted, site enhancement measures are completed, a management plan is provided, baseline conditions are documented, and where identified as practical, adequate stewardship agreement and funds have been established, and all other mitigation actions are performed as required to comply with the requirements and conditions of this permit. The financial assurance document shall be provided to and accepted by the MDEQ prior to signature of this permit by the MDEQ.

42. Prior to the transfer of this permit to another person, the new person must obtain and provide a financial instrument acceptable to the MDEQ in the name of the new person and in the amount required by this permit.

43. Upon request of the permittee and with the submittal of adequate proofs, the MDEQ may release portions of the financial instrument in accordance with the following guidelines:
- i. 50% when adequate executed conservation easements are submitted to the MDEQ and recorded for all wetland preservation areas.
 - ii. 50% when site management plans are completed, signs are posted, any site enhancement activities are completed, monitoring reports are provided, and if determined necessary by the MDEQ, a long term management plan has been submitted and approved by the MDEQ and when appropriate, related stewardship agreements and endowment funds are established.
44. The permittee shall execute a conservation easement over all wetland preservation areas in a form identical to the conservation easement model on the MDEQ's website at www.michigan.gov/wetlands. The original executed conservation easement and associated exhibits must be sent to the MDEQ for review and recording prior to commencement of any permitted work or within 60 days of the issuance of this permit which ever occurs first. Send to: Conservation Easement Coordinator, MDEQ, Water Resources Division, P.O. Box 30458, Lansing, Michigan, 48909, with a copy of the executed easement mailed to the District Office.
45. The permittee may request in writing a permit revision to extend the time deadline for submittal of the conservation easement. Such permit revision shall be considered a minor permit revision pursuant to Section 30313b and must be accompanied by the appropriate fee.
46. The permittee shall provide the following documentation of ownership for the wetland preservation areas. This documentation must be submitted with the original executed conservation easement to the Conservation Easement Coordinator at the above address.
- A title report or title opinion that provides 50-year ownership history including copies of all deeds, encumbrances, easements, severed mineral rights, and other pertinent documents.
 - A written statement from the property owner that there are no easements, encumbrances, or transfers of the property, in whole or in part, not disclosed in the title search or ownership history.
 - Subordination of any property interest (e.g., mineral rights, mortgages, easements) that would interfere with establishment and protection of the conservation easement.
 - A title insurance policy insuring the conservation easement area in the name of the MDEQ, in an amount determined by the MDEQ.
 - A copy of the warranty deed
 - If the property owner is a company, documentation that the person executing the conservation easement has the authority to convey land on behalf of the company.
47. The conservation easement boundaries shall be demarcated by the placement of signage along the perimeter. The signage shall be placed at an adequate frequency, visibility, and height for viewing, made of a suitable material to withstand climatic conditions, and should be replaced as needed. The signage shall include the following bolded language:

WETLAND CONSERVATION EASEMENT
NO CONSTRUCTION OR PLACEMENT OF STRUCTURES ALLOWED.
NO MOWING, CUTTING, FILLING, DREDGING OR
APPLICATION OF CHEMICALS ALLOWED.
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Except as otherwise provided by this permit or approved in writing by the MDEQ, the following activities are prohibited in perpetuity within the mitigation area: alteration of surface topography, creation of paths, trails, or roads; placement of fill, dredging, or excavation; drainage of surface or groundwater; construction or placement of any structure; plowing, tilling, or cultivating the soils or vegetation; cutting, removal, or alteration of vegetation; including the planting of non-native plant species; ranching, grazing, farming; use of chemical pesticides, fungicides, herbicides, or other chemical treatment; construction of unauthorized utility or petroleum lines; storage or disposal of garbage, yard waste, trash, debris, abandoned equipment; accumulation of machinery or other waste materials; use or storage of off-road vehicles; placement of billboards or signage; or use of the wetland for the dumping of untreated storm water (except as otherwise allowed in this permit); or actions or uses detrimental or adverse to water conservation and purity, and fish, wildlife, or habitat preservation.

48. **This paragraph needs to be re-written to better incorporate monitoring requirements for preservation areas, Bill and Todd will look at it.** The permittee shall monitor the mitigation area approved for preservation credit for a minimum of five (5) years. The following information should be collected and provided in the monitoring reports:
- a. Sample vegetation in plots located along transects shown in the plan once between July 15 and August 31 with an approach approved by the MDEQ.
 - b. Provide annual photographic documentation of the mitigation area approved for preservation credit from permanent photo stations located within the mitigation wetland. At a minimum, photo stations shall be located at both ends of each transect. Photos must be labeled with the location, date photographed, and direction.
 - c. Provide a written summary of data from previous monitoring periods and a discussion of changes or trends based on all monitoring results.
 - d. Provide a written summary of all the problem areas that have been identified and potential corrective measures to address them.
49. A monitoring report, which compiles and summarizes all data collected during the monitoring period, shall be submitted annually by the permittee. Monitoring reports shall cover the period of January 1 through December 31 and be submitted to the MDEQ prior to January 31 of the following year.
50. A qualified individual able to identify vegetation to genus and species must conduct the wetland monitoring. The MDEQ reserves the right to reject reports with substandard monitoring data.
51. If the MDEQ determines that the restoration and management goals have not been met, the MDEQ may require subsequent annual monitoring until final approval from the MDEQ can be granted.

52. This permit is being issued for the maximum time allowed under Part 301, Inland Lakes and Streams and Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended, including all permit extensions allowed under the administrative rules R 281.813 and R 281.923. Therefore, no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning at the date of issuance.

53. Other potential paragraphs based on CRC letter to DNR (It was decided that a, b, & c may be better put in a letter rather than as a permit condition)

- a. The applicant agrees to work with the MDNR to develop a plan to re-establish a failed beaver pond to re-establish critical moose habitat.
- b. The applicant agrees to monitor and report vehicle-wildlife collisions to the DNR to determine if additional mitigation measures are needed and to determine where wildlife crossing signs are to be posted.
- c. The applicant agrees to work with the MDNR to limit the building or connection of secondary roads in critical habitat areas identified by the MDNR. In some cases this may involve placing conservation easements, deed restrictions, or purchasing land.
- d. All exposed soils adjacent to the proposed road will be stabilized with weed free straw as soon as possible after construction is completed in each area. These areas will be seeded with native grasses and forbs.
- e. In August of the first three years after final seeding the applicant agrees to survey for invasive species all areas that were disturbed during construction. Any invasive species will be removed or treated with herbicide. Monitoring will continue after the last treatment on an area where invasive species were removed for a period of three years. A report shall be prepared each year summarizing the findings of the invasive species survey and treatment. A copy of the report shall be submitted to the MDEQ and the MDNR.

54. Process to handle permit revisions in the event that work is needed outside of permitted activity. Todd to look at.

55. Upon the start of construction the applicant shall provide a monthly summary to the MDEQ-WRD UP district office of work activities completed. Any problems affecting areas regulated by this permit shall also be included in the monthly summary and reported immediately to the UP district office.

56. Prior to the initiation of any activities authorized by this permit, the permittee shall submit a specific restoration plan for each of the wetland areas to be restored by removal of existing road materials. Information indicating the anticipated effects on the hydrological regime of the adjacent/restored wetlands shall be included in the plan, including measures to assure that the hydrology is not altered in way that has further detrimental effect on the wetland.

The plan shall include the placement of salvaged wetland soils from authorized excavation areas, and a vegetation management plan with standards for the establishment of appropriate native vegetation and the prevention of the establishment of invasive plant species.

The poor fen and muskeg restoration areas at Stations xxx and xxx respectively, shall include the removal of only the top portion of existing road fill materials and placement of native wetland soils to the adjacent wetland elevation.

57. This permit shall become effective on the date of the MDEQ representative's signature.
Upon signing by the permittee named herein, this permit must be returned to the
MDEQ's Water Resources Division, for final execution.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

X

_____	_____
Permittee	Date

X

Printed Name and Title of Permittee